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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,558

08/28/2006

Martin Ferguson-Pell

117-583 (AMK)

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07/23/2009

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EXAMINER

MACARTHUR, VICTOR L

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

07/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,558	Applicant(s) FERGUSON-PELL ET AL.	
	Examiner VICTOR MACARTHUR	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31,33-38,41-80,83 and 84 is/are pending in the application.
- 4a) Of the above claim(s) 11,16,17,19-28 and 72-74 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10,12-15,18,29-31,33-38,41-71,75-80,83 and 84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

Claims 1-10, 12-15, 18, 29-31, 33-38, 41-71, 75-80, 83 and 84 are rejected.

Claims 11, 16, 17, 19-28, 72-74 are withdrawn.

Claims 32, 39, 40, 81 and 82 are canceled.

Note to Applicant Regarding Compact Prosecution

The applicant is entitled to as many claims as necessary to define the invention.

However, in the interest of compact prosecution the examiner strongly suggests that a reply to this office action include an amendment to reduce the number of claims as follows.

- Reduce the number of independent claims (preferably to a single claim) and amend to recited the broadest scope, therein, to which the applicant feels will overcomes the prior art.
- Include dependant claims, which positively recite **all** of the structure the applicant deems critical to the invention and that the applicant would be willing to accept in an allowance.

This insures that the applicant will be presented with all of the prior art pertinent to the invention (see MPEP § 904.03).

The above guidelines should be adhered to as early in the prosecution as possible, preferably in the original presentation of claims. The current version of claims is so numerous so as to make efficient prosecution impossible. Note that even applicant's representative is having trouble keeping track of the current list of claims (Note applicant's representative's statement in

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the filing of 2/11/2009 that claims 74-83 read on the elected species. Note also that claims 81 and 82 were in fact canceled in the filing of 5/8/2006).

If the applicant insists on maintaining the current enormous body of claims, the examiner suggests carefully reviewing them for any errors (objections and rejections) that exist in addition to those found and noted below, such as lack of antecedent basis for terms, improper double inclusions, etc.

Election/Restrictions

Applicant's election without traverse of Species 1, Figs.1A-9 and 28, in the reply filed on 2/11/2009 remains acknowledged.

Claims 11, 16, 17, 19-28, 72-74 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/11/2009.

Drawings

The drawings were received on 5/26/2009. These drawings are acceptable for the purposes of examination.

Claim Objections

The claims are objected to because of the following informalities:

- The numbering of claims is incorrect. A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim. A claim which depends from a dependent claim should not be numerically separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. See MPEP § 608.01(n). For instance, claim 36 depends from dependent claim 9 but is improperly numerically separated from claim 9 by dependent claims 29-35. Also, claim 62 depends from dependent claim 60, but is improperly separated from claim 60 by claim 61 which depends from 53. Contrary to applicant's arguments, this objection can be overcome by canceling the improperly numbered claims and introducing new properly numbered claims that are ordered from broadest in scope to narrowest.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-10, 12-15, 18, 29-31, 33-38, 41-71, 75-80, 83 and 84 are rejected under 35 U.S.C. 102(b) as anticipated by Hoberman USPN 6219974.

The prior art structure is substantially identical to the claimed structure such that the PTO must presume claimed functions/properties to be inherent, thus presenting a *prima facie* case and properly shifting the burden to prove otherwise with evidence to the applicant. It is fairly the applicant's burden to obtain and test the prior art since the Patent Office is unable to manufacture or obtain prior art products. Mere allegation that the prior art does not inherently possess applicant's claimed functions/properties is not sufficient without actual evidence proving as much. See the following:

MPEP §2112.01 (I);

In re Ludtke, 441 F.2d 660, 664, 169 USPQ 563, 566 (CCPA 1971);

In re Brown, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972);

In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977);

In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986);

In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed.Cir. 1990);

In re Schreiber, 128 F.3d 1473, 1478 44 USPQ2d 1429, 1432 (Fed.Cir.1997)

Claims 1-10, 12-15, 18, 29-31, 33-38, 41-71, 75-80, 83 and 84 are rejected under 35 U.S.C. 102(b) as anticipated by McDonnell USPN 6425703.

The prior art structure is substantially identical to the claimed structure such that the PTO must presume claimed functions/properties to be inherent, thus presenting a *prima facie* case and properly shifting the burden to prove otherwise with evidence to the applicant. It is fairly the

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applicant's burden to obtain and test the prior art since the Patent Office is unable to manufacture or obtain prior art products. Mere allegation that the prior art does not inherently possess applicant's claimed functions/properties is not sufficient without actual evidence proving as much.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 12-15, 18, 29-31, 33-38, 41-71, 75-80, 83 and 84 rejected under 35 U.S.C. 103(a) as being unpatentable over Hoberman US2002/0112413 in view of McDonnell USPN 6425703.

Hoberman discloses a flexible sheet structure comprising: a plurality of modules overlappingly connected together by pivots. Hoberman does not disclose that the pivots are ball and socket joints. McDonnell discloses that such overlapping module pivot connections should be ball and socket joints for the purpose of improving articulation to be both flexible and rotatable interconnection between modules (col.2, ll.59 - col.3, l.5) thereby allowing construction of a wide range of configurations for storage or transport (col.5, ll.48-51) due to the increased degrees of freedom (col.9, ll.6-13). Note that McDonnell teaches that the ball and socket may be of any number and configurations (col.4, ll.50 - col.5, l.4 and col.9, ll.18-39). Note also that McDonnell is not limited to writing devices (col.9, ll.30-39) such that one of ordinary skill would

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have easily seen the McDonnell ball and socket pivot as being applicable to the Hoverman modules. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the Hoverman modules to be connected by ball and socket pivots, as taught by McDonnell, for the purpose of increasing the degrees of freedom (McDonnell, col.9, ll.6-13).

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Referring to sheet structure:

USPN 6082056

USPN 3747261

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (571) 272-7085. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

July 24, 2009

/Victor MacArthur/
Primary Examiner, Art Unit 3679